UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,855	08/08/2004	Sung-san Chang	LITP0042USA	4854

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NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER
HEYI, HENOK G

ART UNIT	PAPER NUMBER
2609	

NOTIFICATION DATE	DELIVERY MODE
07/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

winstonhsu.uspto@gmail.com
Patent.admin.uspto.Rcv@naipo.com
mis.ap.uspto@naipo.com.tw

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-18* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-18* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>08 August 2004</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

Specification

1.   The abstract of the disclosure is objected to because of grammatical error by

including the preposition "of" between the words "operation" and "is". Correction is

required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueno et

al. US 2005/0204373A1 (Ueno hereinafter).

Re claim 1, a method of determining an optimal control profile for adjusting tray-in/out

speeds of a tray in an optical disk drive, comprising: driving the tray for movement with

an initial control profile; measuring a plurality of tray speeds of the tray when achieving

a plurality of predetermined points in the initial control profile; determining a plurality of

comparison values according to the plurality of tray speeds and a plurality of

predetermined tray speeds; and determining an optimal control profile according to the

comparison values (controlling means based on a predetermined drive profile in which a

speed is set differently, page 15 para [0290]).

Re claim 2, the method of claim 1, wherein the optical disk drive divides tray movement

distance of the tray into a plurality of segments with the predetermined points (speed is

set differently in accordance with an elapsed time until the completion of traveling of the

tray from the start of the traveling of the tray, page 15 para [0290]); the optical disk drive

further comprising a plurality of sensors operative to measure the speed of the tray

corresponding to the predetermined points (calculating means which measures a

loading time and an ejection time of the disk based on the a result of the detection

performed by the detecting means, page 15 para [0290]).

Re claim 3, the method of claim 2, wherein tray speeds are calculated according to

lengths of the segments and durations of the tray passing through the segments

(calculating means which measures a loading time and an ejection time of the disk

based on the a result of the detection performed by the detecting means, page 15 para

[0290]).

Re claim 4, the method of claim 1, wherein the comparison values are determined

according to differences between the tray speed and the predetermined tray speed (the

controlling means changes at least one of the speed and the elapsed time contained in

the drive profile in accordance with a measured time measured by the calculating

means, page 11 para [0207]).

Re claim 5, the method of claim 1, wherein the optimal control profile is determined by

selecting one from a plurality of preset control profiles (a profile learning control

apparatus which changes a profile in accordance with an individual difference, a change

with time and the like, page 35 para [0630]).

Re claim 6, the method of claim 1, wherein the movement of the tray is tray-in (loading a

tray into inside a disk drive or loading, page 1 para [0003]).

Re claim 7, the method of claim 1, wherein the movement of the tray is tray-out (ejects a

disk out of the disk drive or ejection, page 1 para [0003]).

Re claim 8, the method of claim 1, wherein the method is started with an applied

software (central processing unit (MPU) and a PC, page 34 para [0607] and see also

fig. 47).

Re claim 9, a method of determining an optimal control profile for adjusting tray-in/out speeds of a tray in an optical disk drive, comprising: setting a plurality of control profile sets (a profile learning control apparatus which changes a profile in accordance with an individual difference, a change with time and the like, page 35 para [0630]); driving the tray for movement according to an initial control profile which is one of the control profile sets for deriving a tray speed function (controlling means based on a predetermined drive profile in which a speed is set differently, page 15 para [0290]); and selecting an optimal control profile from the control profile sets according to the tray speed function (for the purpose of measuring a loading time and an ejection time and calculating an optimal drive profile, page 9 para [0169]).

Re claim 10, the method of claim 9, wherein the movement of the tray is tray-in (loading a tray into inside a disk drive or loading, page 1 para [0003]).

Re claim 11, the method of claim 9, wherein the movement of the tray is tray-out (ejects a disk out of the disk drive or ejection, page 1 para [0003]).

Re claim 12, the method of claim 9, wherein the method is started with applied software (central processing unit (MPU) and a PC, page 34 para [0607] and see also fig. 47).

Re claim 13, the method of claim 9, wherein the method is capable of being stopped by a user for selecting the optimal control profile from the control profile sets according to individual preference (manual loading operations, page 19 para [0419] to [0427]).

Re claim 14, a method of determining an optimal control profile for adjusting opening/closing speeds of a cover in an optical disk drive, comprising: setting a plurality of control profile sets (a profile learning control apparatus which changes a profile in accordance with an individual difference, a change with time and the like, page 35 para [0630]); driving the cover for movement according to an initial control profile which is one of the control profile sets for deriving an cover speed function n (controlling means based on a predetermined drive profile in which a speed is set differently, page 15 para [0290]); and selecting an optimal control profile from the control profile sets according to the cover speed function (for the purpose of measuring a loading time and an ejection time and calculating an optimal drive profile, page 9 para [0169]).

Re claim 15, the method of claim 14, wherein the movement of the cover is cover-open (loading a tray into inside a disk drive or loading, page 1 para [0003]).

Re claim 16, the method of claim 14, wherein the movement of the cover is cover-close (ejects a disk out of the disk drive or ejection, page 1 para [0003]).

Re claim 17, the method of claim 14, wherein the method is started with applied

software (central processing unit (MPU) and a PC, page 34 para [0607] and see also

fig. 47).

Re claim 18, the method of claim 14, wherein the method is capable of being stopped

by a user for selecting the optimal control profile from the control profile sets according

to individual preference (manual loading operations, page 19 para [0419] to [0427]).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henok G. Heyi whose telephone number is (571) 272-1816. The examiner can normally be reached on Monday to Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HGH

KIEU-OANH BUI
PRIMARY EXAMINER